

**For the gasoline-derived BTEX compounds in groundwater, the TAC generally agreed to the following target levels for the different pipe materials:**

	<u>DI/PVC MAINS<sup>1)</sup></u>	<u>PVC SERVICES</u>	<u>PE/PB/AC</u>	<u>Existing.</u>
Benzene	7,500 ug/L	3,750 ug/L	200 ug/L*	290 ug/L
Toluene	6,250 ug/L	3,120 ug/L	3120 ug/L*	7,300 ug/L
Ethylbenzene	40,000 ug/L	20,000 ug/L	3,400 ug/L*	3,700 ug/L
Xylenes	48,000 ug/L	24,000 ug/L	19,000 ug/L*	73,000 ug/L

1) Also applies to any metal pipe joined with SBR or other non-resistant rubber gaskets.

\* Note: The TAC did not fully discuss or arrive at a consensus for the target levels associated with PE/PB/AC pipe. The benzene target had been agreed upon at 165 ug/L, however the calculation used to derive this value was revised and the value reported above was determined appropriate. The toluene value is also based on similar calculations, while the ethylbenzene and xylene values were taken from data derived from the ISU/AWWA RF study; all data and calculations were provided by J Gaunt (ISU).

**For the gasoline-derived BTEX compounds in soil, a single set of target levels were calculated and are applicable to all water lines within 10 feet of a soil plume defined to these limits:**

	<u>Proposed</u>	<u>Existing</u>
Benzene	2.0 mg/Kg	1.8 mg/Kg
Toluene	3.2 mg/Kg	120 mg/Kg
Ethylbenzene	45 mg/Kg	15 mg/Kg
Xylenes	52 mg/Kg	NA

**Comment [jag1]:** Numbers in RED have been recomputed based on “slower than” factors based on original lab data. Numbers in BLUE were recalculated as consequences of changes in numbers in RED (E & X groundwater/PVC Services) Numbers in GREEN were revised to reduce to the number of significant figures supported by the underlying lab data.

**Comment [jag2]:** The text of the document discusses that gasketed PVC, DI, or other metal pipes will be treated in the same manner. Column heading should contain “DI” and footnote should address other gasketed metal pipes.

**Comment [jag3]:** The underlying data only support 3 sig figs

**Comment [jag4]:** The underlying data only support 3 sig figs

**Comment [jag5]:** 2x the PVC Services target.

**Comment [jag6]:** Includes precise “slower than benzene” factor of 46x, computed from original lab data. Underlying data support 2 sig figs. Based on 1/8 gas-std. water  
 $3.4 \text{ mg/L} \times 1/8 \times 46 = 19,550$ ; round to 20,000 ug/L

**Comment [jag7]:** 2x the PVC Services target.

**Comment [jag8]:** Includes precise “slower than benzene” factor of 10x, computed from original lab data. Underlying data support 2 sig figs. Based on 1/8 gas-std. water  
 Separate permeation rates for m-X and o+p-X added to get perm. Rate for total X.

$19 \text{ mg/L} \times 1/8 \times 10 = 23,750$ ; round to 24,000 ug/L

**Comment [jag9]:** Underlying data support only 2 sig figs

**Comment [jag10]:** Recomputed based on revised value for ethylbenzene/groundwater/DI-PVC Mains. Calculation method same as before.

**Comment [jag11]:** Recomputed based on revised value for total xylenes/groundwater/DI-PVC Mains. Calculation method same as before. Revised from original 10/5/09 document; 79 was a typo – carrying forward the old number.